

### **REMARKS**

The Office Action mailed January 18, 2006 has been carefully reviewed and considered. Claims 92-97, 101-115 and 119-135 stand rejected by the Examiner. Independent Claims 92, 115, 121 and 128 have been amended along with dependent claims 119, 120 and 127. Claims 92, 115, 119, 120, 121, 127 and 128 having been amended, the claims now pending are claims 92-97, 101-115 and 119-135. Favorable consideration of the claims is respectfully requested.

On page 2, the Examiner notes that previous objections and rejections have been considered and withdrawn. The withdrawn objection and rejection are noted with appreciation.

On pages 2-4 of the Office Action, claims 92-97, 101-107 and 113-114 have been rejected to under 35 U.S.C. 103(a) as being unpatentable over Drzal et al. (US Patent No. 6,565,927) (hereinafter "Drzal" or "Drzal et al."). It is respectfully submitted that Drzal does not teach continuous radiation. Drzal et al. teach the use of "pulsed type" UV emitters, but they do not teach how to use continuous UV radiation as claimed. It is respectfully submitted that simply mentioning in the abstract that the light can be pulse or continuous is not a teaching of the use of both pulsed and continuous light if there is no further explanation of how to use continuous light. Indeed, Drzal only explains how to use pulsed light and does not mention how to use continuous light in the specification where an elaborate description is provided of how to use pulsed light. Furthermore, the independent claims have been amended to recite a method that consists essentially of the recited steps. As previously noted, Drzal et al. teach a two-step process including the application of water in an effort to cool the substrate to avoid

deleterious heating of the surface of the substrate. As such, the prior art methods referenced by the examiner, such as Drzal et al. that disclose a two-step process including a required cooling step or a required cleaning step do not read upon the present claim. The claimed process is much more efficient with respect to time and expense. In view of the amendments to the claims, it is respectfully submitted that the claims do not read on the two-step processes disclosed by the prior art of record and that the present rejection is now moot. To the degree to which the present rejection may be maintained with respect to the aforementioned claims, reconsideration and withdrawal are respectfully requested.

On page 4 and 5 of the outstanding office action, the Examiner has noted that claims 92, 103, 104 and 105, noting that in claims 104 and 105, the substrate has a residence time of either 0.1 or 0.2 seconds and that no difference is seen between exposure to continuous radiation in the short residence time and exposure to pulsed radiation. It is respectfully submitted, however, that pulsing light is something that occurs in less than 0.1 second and that the present invention claims continuous radiation, which is not taught in any of the cited references. Further, it is respectfully submitted that very short residence times are achievable with the combination of fast conveyor belts and small active zones.

On page 5 of the outstanding Office Action, the Examiner has rejected claims 108 -112 under 35 U.S.C. 103(a) as being unpatentable over Drzal as applied to claims 92-97, 101-107 and 113-114, and further in view of Cates et al. (US Patent No. 5,512,123) and Elliott et al. (US Patent No. 5,669,979). As discussed in prior responses, Cates et al. and Elliot et al. two-step processes. In view of the amendments discussed

above, it is respectfully submitted that the claims do not read on the two-step processes disclosed by the prior art of record and that the present rejection is now moot. To the degree to which the present rejection may be maintained with respect to the aforementioned claims, reconsideration and withdrawal are respectfully requested.

On page 6 of the Office action, claims 115, 199 and 120 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Drzal. In view of the amendments discussed above, it is respectfully submitted that the claims do not read on the two-step processes disclosed by the prior art of record and that the present rejection is now moot. To the degree to which the present rejection may be maintained with respect to the aforementioned claims, reconsideration and withdrawal are respectfully requested.

On page 7, the Examiner rejects claims 121-123 as being unpatentable over Drazl. In view of the amendments discussed above, it is respectfully submitted that the claims do not read on the two-step processes disclosed by the prior art of record and that the present rejection is now moot. To the degree to which the present rejection may be maintained with respect to the aforementioned claims, reconsideration and withdrawal are respectfully requested.

The rejection of Claims 124-127, 128-132, 134-135, and 133 on pages 20 and 21 all rely on the disclosure of continuous radiation in Drzal et al. In view of the amendments discussed above, it is respectfully submitted that the claims do not read on the two-step processes disclosed by the prior art of record and that the present rejection is now moot. To the degree to which the present rejection may be maintained with respect to the aforementioned claims, reconsideration and withdrawal are respectfully requested.

Claim 128 stands objected to on page 9 of the previous Office action. Applicant has amended the claim to correct the spelling error and appreciates the Examiner bringing that to our attention.

On page 10 of the Office action, the Examiner rejected claims 115, 119-120 and 127 as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards and the invention. Applicant has accordingly amended claims 115, 119, 120 and 127. Claims 115, 119, 120 and 127 no longer include elements that lack antecedent basis.

Further on page 10 of the Office action, claims 92-94 stand rejected under 35 U.S.C. 102(b) as being anticipated by DE 36 31 123 A1. German Patent No. DE3631123 discloses a two-part procedure in which parts are aggressively cleaned with heated solvents in a first step and then irradiated in a second step with UV radiation for 15 to 30 minutes to achieve desired results for better adhesion to shoe parts. There is no disclosure of a conveying mechanism and the radiation dosage level does not appear to be mentioned. It is apparent that the dosage level must be very low because of the length of time it takes to treat the samples. Also, the treated parts are confined to a chamber making the processes highly inefficient. AS previously noted, the present claims are directed to a one step process in which substrates are exposed to continuous UV radiation. The claimed process is much more efficient with respect to time and expense. In view of the amendments to the claims, it is respectfully submitted that the claims do not read on the two-step processes disclosed by the prior art of record and that the present rejection is now moot. To the degree to which the present rejection may be maintained with respect to the aforementioned claims, reconsideration

and withdrawal are respectfully requested.

In view of the foregoing, it is respectfully submitted that the pending claims of the present application are now in condition for allowance and notification to that effect is earnestly solicited.

Enclosed herewith, please find a Petition for a Three-Month Extension of Time submitted to extend the time for response to the outstanding Office Action from April 18, 2006 to July 18, 2006. Please charge the fee for the Three-month Extension of time for a small entity, for which the present application qualifies, and any additional fees required to make the present response timely filed in the United States Patent and Trademark Office, to Deposit Account No. 13-4300, the law firm of the undersigned Attorney. Thank you.

The Examiner is urged to contact the undersigned attorney by telephone at the telephone number provided below if the undersigned attorney can provide any further information to the Examiner that would be helpful or if there are informalities in the present application that can be addressed easily over the telephone to place the present application in condition for allowance.

The undersigned attorney looks forward to working with the Examiner to resolve any further issues standing in the way of the issuance of a notice of allowance for the present application. If substantial issues relating to patentability are deemed to remain before a notice of allowance can be issued, the Applicant would like to reserve the right to interview the application with the Examiner. The Examiner's consideration in this regard will be appreciated. Thank you.

Respectfully submitted,

For the Applicant,

By his Attorneys

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